

**Amendments to the Drawings:**

The attached replacement drawing sheet makes changes to Fig. 21 and replaces the original sheet with Fig. 21.

Attachment: Replacement Sheet

**REMARKS**

Claims 1-46 are pending in this application. By this Amendment, claim 1 is amended and claims 25-29 and 33-46 are withdrawn. Reconsideration of the application is respectfully requested.

The Office Action objects to the drawings. The drawings are amended by adding the legend "Related Art" to Fig. 21. Accordingly, withdrawal of the objection to the drawings is respectfully requested.

The Office Action rejects claims 1-11 and 14-20 under 35 U.S.C. §102(b) over Soiferman (U.S. Patent No. 5,517,110); claims 12-13 and 21-24 under 35 U.S.C. §103(a) over Soiferman; and claims 30-32 under 35 U.S.C. §103(a) over Soiferman in view of Harzanu et al. (U.S. Patent No. 6,759,850). The rejections are respectfully traversed.

In particular, none of the applied references, alone or in combination, disclose or suggest a circuit board inspection device that includes a supporting substrate disposed substantially in parallel with a part mounting surface of the circuit board, the supporting substrate being fixed to the circuit board at least when in use, as recited in independent claim 1.

Soiferman teaches a method and apparatus for testing unpopulated and inactive populated printer circuit boards for manufacturing defects that do not require electrical contact with the board under test (Abstract). Moreover, Soiferman teaches that the sensor/stimulator unit 41, which the Office Action identifies with a supporting substrate, is substantially in parallel with a first side 46a of a circuit board 46. The Office Action identifies the first side 46a as a part mounting surface. However, Soiferman does not teach that the sensor/stimulator unit 41 is fixed to the circuit board at least when in use, as recited in independent claim 1. The separation between elements 41 and 46 consists of the top side spacing 47, and as such, element 41 is not fixed to the circuit board 46. Thus, Soiferman fails

to disclose or suggest each and every feature of independent claim 1. As such, independent claim 1 and its dependent claims are patentable over Soiferman. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §102(b) is respectfully requested.

Harzanu teaches a system and method for electrically testing electrical circuits in which electromagnetic values that are to be sensed by an array of sensors are forecast or assimilated for use as a reference (Abstract). However, Harzanu fails to cure deficiencies in Soiferman in disclosing or rendering obvious a supporting substrate being fixed to a circuit board at least when in use, as recited in independent claim 1. Thus, Harzanu fails to disclose or suggest the features of claims 30-32, including the limitations of independent claim 1. As such, it would not have been obvious to combine Soiferman and Harzanu to arrive at the claimed invention. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-46 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Tarik M. Nabi  
Registration No. 55,478

JAO:TMN/tje

Attachment:  
Replacement Sheet

Date: January 13, 2006

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--